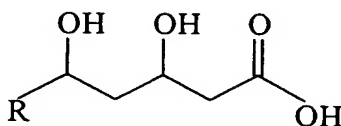
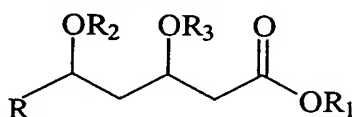


**What is claimed is:**

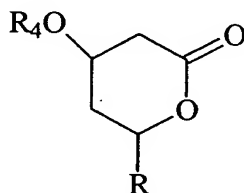
1. A process for preparing a calcium salt of a statin having the formula:



wherein R represents an organic radical, comprising contacting an ester derivative of the statin selected from the group consisting of:



and



with a sufficient amount of calcium hydroxide,

- 15 wherein R<sub>1</sub> is a C<sub>1</sub> to a C<sub>8</sub> alkyl group, and

R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each independently represent hydrogen, or the same or different hydrolyzable protecting group, or R<sub>2</sub> and R<sub>3</sub>, together with the oxygen atom to which each is bonded, form a hydrolyzable cyclic protecting group.

2. The process of claim 1, wherein R is an organic radical from a statin selected from the group consisting of pravastatin, fluvastatin, cerivastatin, atorvastatin, rosuvastatin, pitavastatin, simvastatin and lovastatin.
- 20
3. The process of claim 2, wherein the statin is selected from the group consisting of atorvastatin, rosuvastatin, pitavastatin and simvastatin.
4. The process of claim 3, wherein the statin is rosuvastatin.

5. The process of claim 3, wherein the statin is pitavastatin.
6. The process of claim 3, wherein the statin is simvastatin.
7. The process of claim 3, wherein the statin is atorvastatin.
8. The process of claim 1, wherein the process is carried out in a mixture of water and a C<sub>1</sub> to a C<sub>4</sub> alcohol.

9. The process of claim 1, wherein the contacting is at elevated temperature.

10. The process of claim 1, wherein the contacting takes place in the presence of a phase transfer catalyst.

11. The process of claim 1, further comprising a step of recovering the calcium salt of the statin.

12. The process of claim 1, wherein R<sub>2</sub> and R<sub>3</sub> are both hydrogen.

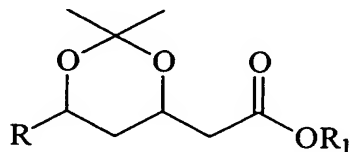
13. The process of claim 1, wherein R<sub>4</sub> is hydrogen.

14. The process of claim 1, wherein at least one of R<sub>2</sub> or R<sub>3</sub> is a trialkylsilyl protecting group.

15. The process of claim 1, wherein R<sub>4</sub> is a trialkylsilyl protecting group

16. The process of claim 1, further comprising a preliminary step of contacting the ester derivative, wherein the ester derivative has at least one protecting group, with an acid catalyst to hydrolyze the protecting group.

17. The process of claim 16, wherein the ester derivative has the formula:



18. The process of claim 17, wherein R is an organic radical from atorvastatin.

19. A pharmaceutical composition comprising the statin salt prepared by the process of claim 1 and a pharmaceutically acceptable excipient.

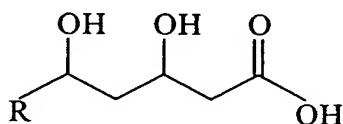
20. A process for preparing rosuvastatin calcium salt comprising contacting a C<sub>1</sub> to a C<sub>8</sub> ester of 7-[4-(4-fluorophenyl)-6-iso-propyl-2-(N-methyl-N-methylsulfonylamino)pyrimidin-5-yl]-(3R,5S)-dihydroxy-(E)-6-heptenoate with a sufficient amount of calcium hydroxide.

21. A process for preparing rosuvastatin calcium salt comprising contacting lactone form of rosuvastatin with a sufficient amount of calcium hydroxide.

22. A process for preparing pitavastatin calcium salt comprising contacting a C<sub>1</sub> to a C<sub>8</sub> ester of (E)-3,5-dihydroxy-7-[4'-(4''-fluorophenyl)-2'-(1''-cyclopropyl)-quinolin-3'-yl]-hept-6-enoate with a sufficient amount of calcium hydroxide.

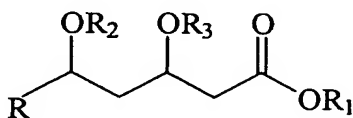
23. A process for preparing pitavastatin calcium salt comprising contacting lactone form of pitavastatin with a sufficient amount of calcium hydroxide.

24. A process for preparing a calcium salt of a statin having the formula:

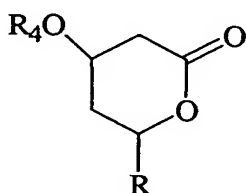


wherein R represents an organic radical, comprising the steps of:

a) adding calcium hydroxide and an ester derivative of the statin selected from the group consisting of:



and



to a mixture of water and a C<sub>1</sub> to a C<sub>4</sub> alcohol,

wherein R<sub>1</sub> is a C<sub>1</sub> to a C<sub>8</sub> alkyl group, and

R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each independently represent hydrogen, or the same or different

- 5 hydrolyzable protecting group, or R<sub>2</sub> and R<sub>3</sub>, together with the oxygen atom to which each is bonded, form a hydrolyzable cyclic protecting group;

b) heating the mixture;

c) precipitating the calcium salt of the statin; and

d) separating the calcium salt.

- 10 25. The process of claim 24, wherein R is an organic radical from a statin selected from the group consisting of pravastatin, fluvastatin, cerivastatin, atorvastatin, rosuvastatin, pitavastatin, simvastatin and lovastatin.

26. The process of claim 25, wherein the statin is selected from the group consisting of atorvastatin, rosuvastatin, pitavastatin and simvastatin.

- 15 27. The process of claim 26, wherein the statin is rosuvastatin.

28. The process of claim 26, wherein the statin is pitavastatin.

29. The process of claim 26, wherein the statin is simvastatin.

30. The process of claim 26, wherein the statin is atorvastatin.

31. The process of claim 24, wherein R<sub>2</sub> and R<sub>3</sub> are both hydrogen.

- 20 32. The process of claim 24, wherein R<sub>4</sub> is a hydrogen.

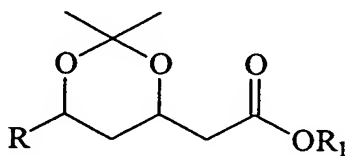
33. The process of claim 24, wherein at least one of R<sub>2</sub> or R<sub>3</sub> is a trialkylsilyl protecting group.

34. The process of claim 24, wherein R<sub>4</sub> is a trialkylsilyl protecting group.

35. The process of claim 24, further comprising a preliminary step of contacting the ester derivative, wherein the ester derivative has at least one protecting group, with an acid catalyst to hydrolyze the protecting group.

36. The process of claim 35, wherein the ester derivative has the formula:

5



37. The process of claim 36, wherein R is an organic radical from atorvastatin.

38. The process of claim 24, wherein the mixture of water and the alcohol is from about a 5% to about a 20% mixture of water and alcohol (v/v).

10 39. The process of claim 24, further comprising adding a phase transfer catalyst to the mixture of step (a).

40. The process of claim 24, wherein the mixture is heated from about 40°C to about 70°C.

41. The process of claim 24, further comprising a filtering step between steps (b) and (c).

15 42. The process of claim 24, wherein precipitating occurs by addition of water.